

## POST-CONSTRUCTION MANAGEMENT GUIDANCE MANUAL

for the

**DEPARTMENT OF PUBLIC WORKS** 

&

**DEPARTMENT OF ENGINEERING** 

CITY OF GULFPORT, MISSISSIPPI

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#### POST-CONSTRUCTION MANAGEMENT GUIDANCE MANUAL

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#### Some of the material in this manual may have been adapted, manipulated, used or copied from:

- 1. "Mississippi Storm Water Pollution Prevention Plan (SWPPP) GUIDANCE MANUAL for Construction Activities." December 2016. Mississippi Department of Environmental Quality.
- "Erosion Control, Sediment Control and Stormwater Management on Construction Sites and Urban Areas, Volume 1 – Erosion and Sediment Control Practices." 2011. Mississippi Department of Environmental Quality.
- "Erosion Control, Sediment Control and Stormwater Management on Construction Sites and Urban Areas, Volume 2 – Stormwater Management." 2011. Mississippi Department of Environmental Quality.
- "Erosion Control, Sediment Control and Stormwater Management on Construction Sites and Urban Areas, Volume 3 – Appendices: Developing Plans & Designing Best Management Practices." 2011. Mississippi Department of Environmental Quality.
- 5. Mississippi's Department of Environmental Quality Website <a href="www.mdeg.ms.gov">www.mdeg.ms.gov</a>
- 6. City of Gulfport Stormwater Website http://www.gulfport-ms.gov/Eng\_stwater\_man.shtml

### Section 1 Introduction

The City of Gulfport has long advocated stormwater management to control the pollution of receiving waters not only within its watersheds but ultimately along the downstream reaches and into the Gulf of Mexico.

The City of Gulfport utilized much of the material originally developed by MDEQ as part of the 2011 General Permit and in particular the information detailed under the proposed "Post Construction Storm Water Control for New Developments and Redevelopment Projects" requirements in preparing their original draft of this document.

This document is structured to provide less technical users with an overview of the City of Gulfport's post-construction stormwater management requirements. More technical users can find information that will help them prepare complete permit submittals and provide them with details that may help them meet performance standards.

## Section 2 Purpose

The regulated stormwater facilities within the City of Gulfport lie on both public and private property. Portions of the stormwater infrastructure are constructed through the City of Gulfport's capital improvement projects and portions are constructed through private residential and commercial development. The City, private property owners, or other authorities such as the County will ultimately own, operate, and maintain these facilities.

In order to responsibly regulate these stormwater infrastructure facilities, consistent policies and procedures for permitting and maintaining the facilities as well as detailed construction practices are necessary regardless of the entity financing and managing the facilities.

The purpose of this manual is to provide standards to assure quality and consistency in the permitting, design, construction, and maintenance of all stormwater infrastructure facilities constructed within the City of Gulfport.

### Section 3 Stormwater Ordinance

#### APPENDIX C - EROSION, SEDIMENT, AND POST-CONSTRUCTION CONTROL

#### **ORDINANCE NO. 2419**

REVISION TO ORDINANCE NO. 2416

AN ORDINANCE ADOPTING AND ENACTING AN EROSION, SEDIMENT, AND POST-CONSTRUCTION STORMWATER CONTROL TO THE NEW CITY OF GULFPORT, MISSISSIPPI CODE OF ORDINANCES ADOPTED UNDER ORDINANCE NUMBER 1826 THE 5TH DAY OF JANUARY, 1989, TO BE ADDED AS APPENDIX C, EROSION, SEDIMENT, AND POST-CONSTRUCTION CONTROL.

WHEREAS, the Mayor and City Council deems it necessary to reduce the discharge of pollutants, protect water quality, and satisfy applicable water quality requirements of the Clean Water Act;

WHEREAS, the Mayor and City Council has given due consideration to the recommendation of the City of Gulfport reviewing Departments and to the comments, evidence and proceeding adduced and occurring at the public hearing, and has studied and considered the provisions of this ordinance;

WHEREAS, the City of Gulfport is a growing, family-oriented community with a majority of the developed land occupied by residential neighborhoods and a population concerned with quality of life issues;

WHEREAS, the City of Gulfport acknowledges a need to adopt controls to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing in watersheds within this jurisdiction;

WHEREAS, the City of Gulfport acknowledges a need to adopt controls to minimize increase in nonpoint source pollution caused by stormwater runoff from development which otherwise degrades local water quality;

WHEREAS, the City of Gulfport acknowledges a need to adopt controls to minimize the annual volume of surface water runoff which flows during and following development to the maximum extent practicable;

WHEREAS, the City of Gulfport acknowledges a need to adopt controls to reduce stormwater runoff rates and volumes, soil erosion and nonpoint source pollution, wherever possible, through stormwater management controls and to ensure that these management controls are properly maintained and pose no threat to public safety;

WHEREAS, the City of Gulfport acknowledges EPA Stormwater Phase II requirements and supports such goals and initiatives;

WHEREAS, the City of Gulfport has the legal authority to institute any appropriate action or proceedings, to correct, or abate such violations;

WHEREAS, the City of Gulfport acknowledges the implementation of "Best Management Practices" as a means to ensure the most effective, economical, and practical way of reducing or preventing polluted runoff is employed;

NOW, THEREFORE, BE IT ORDAINED BY THE MAYOR AND CITY COUNCIL OF THE CITY OF GULFPORT, MISSISSIPPI, AS FOLLOWS:

Footnotes:

Editor's note— Ord. No. 2419, §§ 1—11, adopted Jan. 19, 2005, amended Appendix C in its entirety and enacted similar provisions as set out herein. The former Appendix C derived from Ord. No. 2416, §§ 1—11, adopted Dec. 21, 2004.

The ordinance has been set out substantially as adopted. Obvious misspellings and/or punctuation errors have been corrected without notation. A uniform system of capitalization, citation to state statutes, and expression of numbers in text has been used to conform to the Code of Ordinances. Additions made for clarity are included in brackets [ ].

#### Section 1. - Purpose.

- 1.1 The purpose of this ordinance is to establish minimum stormwater management requirements and controls to protect and safeguard the general health, safety, and welfare of the public residing in watersheds within this jurisdiction. This ordinance seeks to meet that purpose through the following objectives:
  - 1.1.1 Minimize increase in stormwater runoff from any development in order to reduce siltation, increases in stream temperature, stream bank erosion, and maintain the integrity of stream channels.
  - 1.1.2 Minimize increase in nonpoint source pollution caused by stormwater runoff from development which otherwise degrades local water quality.
  - 1.1.3 Minimize the annual volume of surface water runoff which flows from any specific site during and following development to not exceed the pre-development hydrologic regime to the maximum extent practicable.
  - 1.1.4 Reduce stormwater runoff rates and volumes, soil erosion, and nonpoint source pollution, wherever possible, through stormwater management controls and to ensure that these management controls are properly maintained and pose no threat to public safety.

(Ord. No. 2419, § 1, 1-19-05)

#### Section 2. - Definitions.

- 2.1 General rules: The following general rules shall govern the interpretation of words and phrases used in this ordinance:
  - 2.1.1 The word "person" includes a firm, association, organization, partnership, trust, company or corporation as well as an individual.
  - 2.1.2 The present tense includes the future tense, the singular number includes the plural, and the plural number includes the singular.
  - 2.1.3 The word "shall" is mandatory; the word "may" is permissive.
  - 2.1.4 The words "used or occupied" include the words "intended, designed, or arranged to be used or occupied."
- 2.2 Words and phrases used in this ordinance are defined as follows for the purpose of this ordinance:

Best management practices means the most effective, economical, and practical way of reducing or preventing polluted runoff.

*Building* means any structure built or used for the support, shelter, or enclosure of persons, animals, chattels, or moveable property of any kind and which is permanently affixed to the land.

Buffer means a vegetated strip of land to filter runoff and protect from erosion.

Certificate of occupancy or certificate of completion means a certificate issued by the building code services division indicating that the building or land in question can be occupied or used. Issuance of a certificate of occupancy or certificate of completion shall not be construed as an approval of a violation of the provisions of the City of Gulfport Code of Ordinances, or a grant of a variance, or waiver of right to enforce a code provision.

Channel means a natural or artificial watercourse with a definite bed and banks that conducts continuously or intermittently flowing water.

Clearing means any activity that removes the vegetative surface cover.

"Cluster duplex" means two (2) or more duplex developments being constructed on a single site or adjacent site by the same developer, owner, or contractor simultaneously.

Dedication means the deliberate appropriation of property by its owner for general public use.

Detention means the temporary storage of stormwater runoff in a stormwater management practice with goals of controlling peak discharge rates and or providing gravity settling of pollutants.

Developer means a person who undertakes land disturbance or development activities.

Development means any man-made changes to improved or unimproved real estate, including but not limited to buildings or other structures, mining, dredging, filling, grading, paving, excavation, or drilling operation.

Discharge means the emission, giving off, or dumping of gases, liquids, or chemicals

Drainage easement means a legal right granted by the landowner to a grantee allowing use of private land for stormwater management purposes.

Drainage way means any channel that conveys surface stormwater runoff.

Erosion control means a measure or activity that prevents erosion.

Erosion and sediment control plan means a stormwater pollution prevention plan for the proposed development indicating the specific measures and sequencing to be used to control sediment and erosion on a development site during and after construction, in accordance with the most recent edition to the Mississippi Department of Environmental Quality (MDEQ) requirements established in the Mississippi Stormwater Pollution Prevention Plan (SWPPP) Guidance Manual for Construction Activities.

Exposed soil areas means all areas of the construction site where the vegetation (trees, shrubs, brush, grasses, etc.) or impervious surface has been removed, thus rendering the soil more prone to erosion. This includes topsoil stockpile areas, borrow areas and disposal areas within the construction site. It does not include temporary stockpiles or surcharge areas of clean sand, gravel, concrete or bituminous, which have less stringent protection. Once soil is exposed, it is considered "exposed soil," until it meets the definition of "final stabilization."

Final stabilization means that all soil disturbing activities at the site have been completed, and that a uniform (evenly distributed, e.g., without large bare areas exceeding 6" X 6" square) perennial vegetative cover with a density of seventy-five (75) percent of the cover for unpaved areas and areas not covered by permanent structures has been established, or equivalent permanent stabilization measures have been employed. Simply sowing grass seed is not considered final stabilization.

Grading means excavation or fill of material, including the resulting conditions thereof.

*Hotspot* means an area where land use or activities generate highly contaminated runoff, with concentrations of pollutants in excess of those typically found in stormwater.

Impervious coverage means those surfaces that cannot effectively infiltrate rainfall (e.g., building rooftops, pavement, sidewalks, driveways, etc.)

Industrial stormwater permit means a National Pollutant Discharge Elimination System permit issued to a commercial industry or group of industries which regulates the pollutant levels associated with industrial stormwater discharges or specifies on-site pollution control strategies.

Infiltration means the process of percolating stormwater into the subsoil.

*Infiltration facility* means any structure or device designed to infiltrate water to the subsurface. These facilities may be above grade or below grade.

Jurisdictional wetland means an area of land defined by the United States Army Corps of Engineers under their jurisdiction. Typically it means an area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions, commonly known as hydrophytic vegetation.

Land disturbance activity means any activity which changes the volume or peak flow discharge rate of rainfall from the land surface. This may include grading, digging, cutting, scraping, or excavating of soil, placement of fill materials, paving, construction, substantial removal or clearing of vegetation, or any activity which bares soil or rock or involves the diversion or piping of any natural or man-made watercourse.

Nonpoint source pollution means pollution from any source other than from any discernable, confined and discrete conveyances, and shall include, but not be limited to, pollutants from agricultural, silvicultural, mining, construction, subsurface disposal and urban runoff sources.

Off-site facility means a stormwater management measure located outside the subject property boundary described in the permit application for land development activity.

On-site facility means a stormwater management measure located within the subject property boundary described in the permit application for land development activity.

Perimeter control means a barrier that prevents sediment from leaving a site by filtering sediment-laden runoff or diverting it to a sediment trap or basin.

*Permit* means a permit issued by the City of Gulfport for the construction or alteration of ground within its corporate city limits and does not exempt or supersede the applicant from complying with other federal, state, or local permit requirements.

Permit review committee reviews single-family residential building permits and consists of the building code services division and planning division.

*Phasing* means clearing a parcel of land in distinct phases, with the stabilization of each phase completed before the clearing of the next.

Post-construction stormwater management plan means the design and use of structural or non-structural practices that are designed to reduce stormwater runoff pollutant loads, discharge volumes, and/or peak flow discharge rates for proposed construction and development. These facilities may or may not require a stormwater maintenance agreement.

Plan review committee is charged with reviewing all building permits for cluster duplex, multi-family, commercial, industrial developments and other large scale subdivision developments, and is comprised of representatives of several City of Gulfport departments or divisions as follows: Public works department (streets and drainage, traffic, water and sewer), engineering department, fire prevention division, planning division, and building code services division.

Recharge means the replenishment of underground water reserves.

Redevelopment means any construction, alteration or improvement requiring a building permit.

Sediment control means measures that prevent eroded sediment from leaving the site.

Site means a parcel of land or a contiguous combination thereof, where grading work is performed as a single unified operation.

Stabilization means the use of practices that prevent exposed soil from eroding.

Start of construction means the first land disturbing activity associated with a development, including land preparation such as clearing, grading, and filling; installation of streets and walkways; excavation for basements, footing, piers, or foundation; erection of temporary forms; and installation of accessory buildings such as garages.

Stop work order means an order issued which requires that all construction activity on a site be stopped.

Stormwater design manual means the most current edition of the Planning and Design Manual for the Control of Erosion, Sediment and Stormwater written by the Mississippi Department of Environmental Quality, Mississippi Soil and Water Conservation Commission and the USDA Natural Resources Conservation Service.

Stormwater maintenance agreement means a document that legally provides for long-term maintenance of stormwater management practices.

SWPPP means a stormwater pollution prevention plan.

Stormwater pollution prevention plan means a document which describes BMPs for construction activities related to erosion and sediment control to be implemented by the owner or operator of a construction site or development, a person, or a business, as outlined in this ordinance, and in accordance with MDEQ guidelines and regulations.

Stormwater retrofit means a stormwater management practice designed for an existing development site that previously had either no stormwater management practice in place or a practice inadequate to meet the stormwater management requirements of the site.

Stormwater runoff means flow on the surface of the ground, resulting from precipitation.

Stormwater treatment practices means measures, either structural or nonstructural, that are determined to be the most effective, practical means for preventing or reducing point source or nonpoint source pollution inputs to stormwater runoff and water bodies.

Watercourse means any natural lake, river, creek, or other natural body of water or channel having definite banks and bed.

Waterway means a channel that directs surface runoff to a watercourse or to the public storm drain.

(Ord. No. 2419, § 1, 1-19-05)

#### Section 3. - Permits.

- 3.1 Permit for land disturbance.
  - 3.1.1 To serve the public interest by controlling non-points source pollution, no land owner or land operator shall be issued any building permit for land disturbance activities without first meeting the requirements of federal, state, and local codes.
  - 3.1.2 Not withstanding any other provisions of this ordinance, any proposed construction or development project that results in an additional or added twenty thousand (20,000) square feet of impervious area will be required to obtain a permit in accordance with section 3.5 of this ordinance.
- 3.2 Exceptions to land disturbance permit.
  - 3.2.1 Any emergency activity that is immediately necessary for the protection of life, property, or natural resources.
  - 3.2.2 Existing nursery, forestry, logging or agricultural operations conducted as a permitted main or accessory use and is so recognized by the City of Gulfport Engineering Department as such.
    - 3.2.2.1 A list of such activities shall be maintained by the engineering department.
- 3.3 Activities not requiring a permit from the City of Gulfport but are subject to fines for noncompliance.
  - 3.3.1 Clearing of land with a land disturbance of less than ten thousand (10,000) square feet in area shall not require a permit but shall follow best management practices.
  - 3.3.2 The transportation of soil or fill.
    - 3.3.2.1 Such material shall be covered and protected to ensure debris is not distributed to the environment.
  - 3.3.3 The transportation of items other than soil and fill.
    - 3.3.3.1 All materials in transit shall be secured to ensure no debris or chemicals are distributed into the environment which affects the City of Gulfport stormwater.
  - 3.3.4 Landscaping.
    - 3.3.4.1 The preparation for or placement of sod or use of other planting materials less than a total of ten thousand (10,000) square feet does not require a permit. Any amount of soil disruption over this amount and under five (5) acres shall submit plans in accordance with this ordinance to building code services division. If the land disturbance is less than one (1) acre, the permit shall comply with section 3.4. Land disturbances over one (1) acre shall comply with section 3.6.
  - 3.3.5 Stabilization requirements.
    - 3.3.5.1 Permanent vegetation shall be seeded or planted within thirty (30) days after the final grade is reached. Planting guidance for permanent vegetative practices is included in chapter 5 of the Stormwater Design Manual.
    - 3.3.5.2 Any area of revegetation must exhibit a survival of a minimum of seventy-five (75) percent of the crop cover throughout the year immediately following revegetation and shall not be allowed to have bare areas exceeding 6" X 6" square. Revegetation shall be repeated in successive years until the minimum seventy-five (75) [percent] survival for one (1) year is achieved and no bare areas exceed 6"X6" square.
- 3.4 Permit application requirements for single-family residences, single duplex, accessory use activities or additions requiring a permit on sites disturbing less than five (5) acres.
  - 3.4.1 The total amount of area to be disturbed by the proposed construction.

- 3.4.2 An explanation of the type of fill to be used and how the proposal fill will affect the drainage along with a diagram showing the existing and projected change to the current land configuration.
- 3.4.3 A drainage plan showing the existing drainage features and proposed changes.
- 3.4.4 A copy of the erosion and sediment control plan for the proposed development, in accordance with the most recent edition of the Mississippi Department of Environmental Quality (MDEQ) requirements established in the Mississippi Stormwater Pollution Prevention Plan (SWPPP) Guidance Manual for Construction Activities. The plan shall meet with the specifications for small construction from one (1) to five (5) acres. (MDEQ does not typically require SWPPPs for such development to be reviewed by their agency.)
- 3.4.5 If the development disturbs one (1) acre or more, or disturbs less than one (1) acre but is part of a larger common plan of development or sale that disturbs one (1) acre or more, a copy of the post-construction stormwater management plan must be submitted and must comply with sections 6 and 7 of this ordinance.
- 3.4.6 Submittal of these plans does not require the signature of a licensed contractor, engineer, or certified professional in erosion and sediment control and may be submitted by a layperson.
- 3.5 Application requirements for cluster development of duplexes, town homes, multi-family complexes, commercial activities and industrial activities on sites disturbing less than one (1) acre.
  - 3.5.1 Identification and delineation of all landscaped areas and buffer planting strips for the building site. A copy of the tree permit shall be attached if a tree permit is required for the site.
  - 3.5.2 The total amount of area to be disturbed by the proposed construction.
  - 3.5.3 An explanation of the type of fill to be used and how the proposal will affect the drainage along with a diagram showing the existing and projected change to the current land configuration.
  - 3.5.4 A copy of the erosion and sediment control plan for the proposed development in accordance with the Mississippi Department of Environmental Quality (MDEQ) requirements established in the Mississippi Stormwater Pollution Prevention Plan (SWPPP) Guidance Manual for Construction Activities. The plan shall meet with the specifications for small construction from one (1) to five (5) acres. (MDEQ does not typically require SWPPPs for such development to be reviewed by their agency.)
    - 3.5.4.1 This plan shall include a compliance statement agreeing that any land clearing construction, development, or transportation involving the movement of earth shall be in accordance with federal, state, local laws and as submitted in subject plan.
  - 3.5.5 If the development is less than 1 (one) acre but is part of a larger common plan of development or sale that disturbs one (1) acre or more, a copy of the post-construction stormwater management plan must be submitted and must comply with sections 6 and 7 of this ordinance.
  - 3.5.6 Submittal of these plans does not require the signature of a licensed contractor, engineer, or certified professional in erosion and sediment control and may be submitted by a layperson.
- 3.6 Application requirements for cluster duplex on single or multiple sites, town homes, multi-family complexes, commercial activities and industrial activities on sites disturbing one (1) acre or more.
  - 3.6.1 Landowners proposing the development or re-development of one (1) or more acres shall submit and receive a permit from the City of Gulfport for the disturbance of land. With this submission the following elements shall be included: A copy of the erosion and sediment control plan, notice of intent, and post-construction stormwater plan in accordance with sections 5, 6, and 7 of this ordinance.
    - 3.6.1.1 A licensed contractor, engineer, or certified professional in erosion and sediment control shall develop the plan and shall be responsible for construction, fill and grading activities.
  - 3.6.2 All required federal, state, and local permits shall be applied for and received prior to requesting a building permit.
  - 3.6.3 The owner or operator shall inspect all drainage facilities while under construction. When facilities are not constructed according to approved plans, the city engineer, public works director or building official shall have authority to compel compliance and have any situations corrected which are not according to the

- approved plans. All drainage facilities located on private property shall be accessible at all times for inspection by city personnel.
- 3.6.4 Certification by the owner or operator that projects were built as permitted shall be provided upon completion of final grading.
- 3.6.5 As-built plans will be required for any drainage facility that is proposed to be maintained by the city as part of the stormwater maintenance agreement for the project or development. As-built plans shall be submitted in a paper and electronic format. Two (2) copies of each shall be provided to the building code services division for distribution. Electronic copies shall be in format compatible with the city's mapping program. Paper copies shall be stamped and signed by a professional engineer. As-built plans shall show the final grades, elevation and locations of all structures and utilities, drainage features, and final design specifications for all construction and stormwater management facilities to be maintained by the city.
- 3.7 Required attendant items in common to all development within the City of Gulfport for building, grading, or construction permit.
  - 3.7.1 When a consulting firm is retained by the applicant, the name of the applicant's principal contact at such firm.
  - 3.7.2 If the development is to be performed in phases, a notice of intent with expected development dates shall be provided.

#### Section 4. - Review and approval.

- 4.1 Application procedure.
  - 4.1.1 A complete permit application as listed herein for land disturbance activity shall be filed with building code services division on any regular business day. The building official shall transmit the request to the appropriate review departments.
  - 4.1.2. Application for the construction of a single-family residence, a single duplex, or other accessory use activity which requires a permit on subject sites shall be reviewed by the building code services division and the planning division. The building official will act on all applications within seven (7) working days after the applicant has fully complied with provisions of this ordinance. The building official shall either issue a permit or notify the applicant in writing of the reasons for the refusal.
  - 4.1.3 Application for all other type of development shall be reviewed by the site plan review committee within ten (10) working days of receiving a complete application. The site plan review committee shall act to approve, disapprove, or approve with conditions the site plan application.
    - 4.1.3.1 If any of the plans required herein are incomplete, the building official shall send notification of required items to the applicant. All time is suspended until the requested information is provided. The time period for review shall start over when the application is completed. If an application is disapproved, the applicant may revise those items not in compliance and amend the application. If additional information is submitted, the site plan review committee shall have ten (10) working days from the date the additional information was received to inform the applicant that the plan is either approved or disapproved.
  - 4.1.4 Permit requests requiring a stormwater maintenance agreement shall have any required maintenance easement or right of access agreement in place and documented as part of the post-construction stormwater management plan prior to issuance of a certificate of occupancy or certificate of completion. The owner of the site shall be responsible for maintaining overall responsibility of the stormwater site and shall execute any required maintenance agreement that shall be binding on all subsequent owners of land served by the stormwater management facility.

(Ord. No. 2419, § 1, 1-19-05)

#### Section 5. - Erosion and sediment control plan.

5.1 Erosion and sediment control plans shall be developed in accordance with the Stormwater Design Manual and the SWPPP Guidance Manual for Construction Activities. These documents contain an outline of elements to be included in an erosion and sediment control plan, commonly referred to as an SWPPP, and provides a sample plan.

(Ord. No. 2419, § 1, 1-19-05)

# Section 6. - Design and protection requirements for new developments or re-developments requiring a post-construction stormwater management plan.

- 6.1 Grading, erosion control practices, sediment control practices and waterway crossings shall meet the design criteria set forth in the most recent version of the Stormwater Design Manual. All sites shall establish stormwater management practices to control the peak flow rates of stormwater discharge associated with specified design storms and reduce the generation of stormwater for the site to provide treatment for both water quality and quantity.
  - 6.1.1 Fill slopes shall be no greater than 3:1, except as approved by the building code services division or engineering department to meet other community or environmental objectives.
- 6.2 Clearing and grading of natural resources, such as forests and wetlands, shall be permitted only when in compliance with all other sections of this Code. Clearing techniques that retain natural vegetation and drainage patterns, as described in the Stormwater Design Manual, shall be used to the satisfaction of the building code services division or engineering department.
- 6.3 No clearing shall begin until approved sediment control devices are in place and operable according to Stormwater Design Manual.
- 6.4 Phasing is the preferred method and will be encouraged to be adopted on larger sites. A plan and drawing showing such practices shall be submitted.
- 6.5 Erosion control requirements shall include the following:
  - 6.5.1 Soil stabilization shall be completed as soon as practical but not later than five (5) days after clearing or inactivity in construction. The city engineer, public works director, or building official may shorten this time frame based on projected weather conditions.
  - 6.5.2 If seeding or another vegetative erosion control method is used, it shall become established within two (2) weeks and the building official or city engineer may require the site have another method in place until the soil is stabilized.
  - 6.5.3 Special techniques that meet the design criteria outline in the Stormwater Design Manual on steep slopes or in drainage ways shall be used to ensure stabilization.
  - 6.5.4 Soil stockpiles or similar materials shall be stabilized or covered at the end of each workday.
  - 6.5.5 The entire site shall be stabilized to control erosion at the close of construction for any prolonged periods in excess of forty-eight (48) hours.
  - 6.5.6 Techniques shall be employed to prevent blowing of dust or sediment from the site.
  - 6.5.7 Techniques that divert upland runoff past disturbed slopes shall be employed.
  - 6.5.8 The use of techniques to prevent erosion and sedimentation from entering public roads or other areas including ditches, storm drains, and other drainage facilities.
- 6.6 Sediment control requirements include any of, or a combination of the following:
  - 6.6.1 Settling basins, sediment traps, or tanks and perimeter controls.
  - 6.6.2 Settling basins that are designed in a manner that allows adaptation to provide long-term stormwater management, when necessary or required by building code services division or the engineering department.

- 6.6.3 Protection for adjacent properties by the use of a vegetated buffer strip where practical and the use of perimeter controls.
- 6.7 Waterway and watercourse protection when required shall include:
  - 6.7.1 A temporary stream crossing installed by the contractor and approved by the engineering department.
  - 6.7.2 Stabilization of the watercourse channel before, during and after any in-channel work.
  - 6.7.3 All on-site stormwater conveyance channels designed according to the criteria outlined in the Stormwater Design Manual.
  - 6.7.4 Stabilization adequate to prevent erosion located at the outlets of all pipes and paved channels.
- 6.8 Construction site access requirements shall include a temporary access road and other measures required by building code services division or the engineering department in order to ensure that sediment is not tracked onto public rights-of-way by construction vehicles or washed into storm drains.
- 6.9 Work in or around natural wetlands should be consistent with the requirements outlined in the Coastal Wetlands Protection Act, The Clean Water Act, and all other federal and state requirements regarding wetlands. For new development or re-development, structural and non-structural stormwater treatment practices shall be designed to treat runoff, where required by MDEQ regulations.
  - 6.9.1 To protect stream channels from degradation, appropriate channel protection shall be utilized.
  - 6.9.2 Stormwater discharges to critical areas with sensitive resources (including shellfish beds, recreational areas, water supply reservoirs and groundwater recharge areas) are subject to additional performance criteria, or may need to utilize or restrict certain stormwater management practices.
  - 6.9.3 Stormwater discharges from land uses or activities with higher potential pollutant loadings, known as "hotspots," may require the use of specific structural and pollution prevention practices. Such sites shall be identified on plans upon submission of a construction, grading or building permit application.
- 6.10 Stormwater maintenance agreements.
  - 6.10.1 A legally binding covenant specifying the parties responsible for the proper operation and maintenance for all stormwater management facilities after construction is complete shall be included in the post-construction stormwater management plan and secured prior to issuance for any permits for land disturbance activities.
  - 6.10.2 Enforceable operations and maintenance agreements are required to ensure the system will function as designed during and after construction. The maintenance agreements will include any and all maintenance easements required to access and inspect the stormwater treatment practices, and to perform routine maintenance as necessary to ensure proper functioning of the stormwater treatment practices. The parties responsible for the documented SWPPP BMPs shall make records of the installation, maintenance and repairs on the facility and shall retain these records for at least five (5) years. These records shall be provided to the city engineer annually by January 15 of each calendar year and during inspection of the facility or upon request.
  - 6.10.3 Failure of the owner or operator to maintain the premises shall be cause for the city to take action and to remedy the violation. If the owner fails to perform the maintenance, the City of Gulfport may complete the work with the owner responsible for all costs.

Section 7. - Basin stormwater management design criteria.

- 7.1 Minimum control requirements. Projects shall be designed for the twenty-five (25) year frequency storm event. Peak discharge rates for fifty (50) and one hundred (100) year frequency storm events shall be calculated and the effect of these storms on the stormwater system shown. This shall be submitted as part of the permit application.
- 7.2 [Additional requirements possible.] In addition, if hydrologic or topographic conditions warrant greater control than that provided by the minimum control requirements, the City of Gulfport reserves the right to impose any or all additional requirements deemed necessary to control stormwater flowing from the site or development.

- 7.3 Site design feasibility.
  - 7.3.1 Applicants shall consider the following conditions of the site when they determine the types of practices they will use to control stormwater on the site: topography, the drainage area, depth of the water table, soils, slopes, terrain, and the location of environmentally sensitive areas located on site.
  - 7.3.2 The stormwater management plan shall be designed to remove pollutants and reduce flow velocities, shall utilize an acceptable water quality pre-treatment BMP and shall capture and treat stormwater in areas designated as wetlands, in accordance to specifications defined in the Stormwater Design Manual.
  - 7.3.3 For any structural practice proposed, a landscape plan which affords stabilization of the areas adjacent to the practice will be required.

#### Section 8. - Construction inspection.

- 8.1 The applicant shall notify the building code services division in advance before the commencement of construction.
- 8.2 On-site inspections shall be conducted by building code services division or the engineering department who shall inspect the work and notify the permittee wherein the work fails to comply with the erosion and sediment control plan as approved.
  - 8.2.1 Plans for grading, stripping, excavating, and filling work bearing the stamp of approval of the building official or city engineer shall be maintained at the site during the progress of the work. To obtain required inspections, the permittee shall notify the city as follows:
    - 8.2.1.1 Two (2) days before the start of construction.
    - 8.2.1.2 Upon completion of site clearing.
    - 8.2.1.3 Upon completion of rough grading.
    - 8.2.1.4 Upon completion of final grading.
    - 8.2.1.5 Upon completion of final landscaping.
  - 8.2.2 The city engineer or public works director shall act as designated agent and inspector for all construction done by their employees. All contract work done for the city shall be the responsibility of the contractor and shall comply with the provisions herein.
- 8.3 The city maintains the right to enter the property of the applicant as deemed necessary to make inspection and to ensure compliance.

(Ord. No. 2419, § 1, 1-19-05)

#### Section 9. - Enforcement.

- 9.1 [Inspections.] All drainage facilities located on private property, whether dedicated to the city or not, shall be accessible at all times for inspection.
- 9.2 Violations. No person shall construct, enlarge, alter, repair or maintain any grading, excavation, or fill or cause the same to be done, contrary to or in violation of any of the terms of this ordinance, or any state or federal laws in effect regulating stormwater runoff. Any person adjudicated to be in violation of any of the terms and provisions thereof shall be guilty of a misdemeanor and subject to a fine for the first offense not to exceed two hundred fifty dollars (\$250.00) or thirty (30) days in jail or both. For each day that such violation remains unresolved after the first day that the offense occurred, and if the court finds that reasonable action has not been taken by the defendant to correct the violation, it shall be treated as a separate and subsequent offense each day punishable by a fine not to exceed five hundred dollars (\$500.00) or ninety (90) days in jail or both.

- 9.2.1 All violations of this ordinance are hereby declared to be offenses against the city requiring actions to preserve the good order and peace and to prevent injury to, destruction of, or interference with the public or private property. The building official and the public works director, or their designated enforcement officers shall be hereby vested with authority to investigate and inspect for violations of this ordinance, and to process and issue citations for such misdemeanors in the manner provided by law and in accordance with instructions of the chief of police, a municipal court prosecuting attorney, or the procedures established by the municipal court.
- 9.2.2 If the building official or public works director, or their designated enforcement officer finds evidence to support a violation of this ordinance, the developer, or other person (i.e. Landowner) found to be responsible for such violation shall be given notice in writing of the violation indicating the nature and location of the violation and ordering action determined by the official to be necessary to correct it. Among the actions that may be ordered is a discontinuance of any actions on site. In such case, if the official deems a need for assistance to fulfill his duties, he may call upon the chief of police to furnish police assistance.hg;ol0; 9.3 Stop work order. Any person holding a site development permit pursuant to this ordinance who violates the terms of the permit or implements site development in a manner that is a cause or threat to cause a material adverse affect on the health, welfare or safety of persons residing or working in the neighborhood or development site or a threat of detriment to the public welfare or a threat or of irreparable damage to property or improvements in the neighborhood, the building official, public works director, or city engineer may institute in behalf of the city legal process in law or equity for an injunction, writ of mandamus or other appropriate remedy to prevent or prohibit violation of any provision of this ordinance. If the city finds that immediate action is necessary, it may take action first to correct the problem or imminent threat, and then notify the developer, landowner, or contractor responsible who shall be liable civilly to city for reasonable costs of corrective services.hg;ol0; 9.4 Restoration of lands. Violators may be required to restore land to its undisturbed condition. In the event, after written notice is given, restoration is not undertaken within a reasonable time, the city by official act of the mayor and city council may take corrective action, and hold the violator liable as a civil debt for the reasonable costs thereof.

Section 10. - Separability.

10.1 Separability. Should any section or provision of this ordinance be declared by the court to be unconstitutional or invalid, such decision shall not affect the validity of the ordinance as a whole, or of any part hereof, other than the part so declared to be unconstitutional or invalid, and the remainder of this ordinance shall remain in full force and effect.

(Ord. No. 2419, § 1, 1-19-05)

Section 11. - [Implementation and review.]

This ordinance shall be in full force and published according to law and shall be spread on the minutes of the Gulfport City Council as specified:

- 1.1.1 *Implementation.* This ordinance shall be made available for inspection and disseminated to all land owners applying for building permits involving land disturbance activities from and after the effective date hereof. Permit applications and approval shall be required under this ordinance on and after June 1, 2005, when the ordinance shall be fully implemented.
- 11.2 Review. The delay in implementation of the ordinance shall provide a period for builders and developers to become acclimated to the procedures and requirements hereof. Prior to the effective date of implementation on June 1, 2005, this ordinance shall be subject to comment, and final review and revision by the governing authority.

(Ord. No. 2419, § 1, 1-19-05)